they may be safely left to the discretion of the compounder. The mode made use of in one establishment where I have superintended its preparation is as follows: a quantity of the roots of sarsaparilla, either split or not, but not cut into short portions, is either subjected to the vapour of steam for a few minutes, or if time admit, left in a damp cellar for twenty-four or thirty-six hours, and subsequently introduced for an hour into a stove or oven moderately heated, which processes have the effect of loosening the connection between the bark and alburnum and ligneous portion, when the former may be easily stripped off, and powdered finely in a mortar, and the powder may afterwards be taken simply in a spoonful of any bland fluid, or may, in cases where quinine is indicated, be united with a suitable proportion, and the flavour be covered with a little oil of cinnamon—or the powder either simply, or combined with sulphate of quinine, or in gouty habits, with capsicum or ginger, may be made into pills, and administered in the proportion of from two to four scruples daily.—*Ibid.*, No. 2, from *Dublin Journ. Med. Sci.*, July 1840.

14. *On the Advantages of a High Temperature in the Preparation of Blistering Plaster.* By M. Donovan, Esq.—It is a common opinion that blistering plaster is injured by being heated; and hence it is customary, in preparing it, to mix in the powder of cantharides with the fatty ingredients when they are about to solidify, after having been melted. This mode of proceeding is directed also in the pharmacopœias; and the caution seems founded on the supposition that the cantharidin or vesicating principle is of so delicate a nature that it would be injured by any higher temperature.

The supposition I believe to be unfounded, and the precautions used in making the plaster not only unnecessary but injurious.

Several years since I made the following experiments:—A quantity of blistering plaster was prepared exactly according to the pharmacopœia. Another portion was made by mixing the fatty ingredients with the powdered cantharides, exposing the mixture to the temperature of 250° for half an hour, and then, while the plaster was very hot, straining off the cantharides. With each of these plasters a blister was made in the usual manner and applied to the inside of my thighs. In eight hours the plaster made by heating to 250° had reddened the skin more than the other; in twelve hours a few vesicles were produced by the former and not by the latter; but in sixteen hours there was a perfect and equal vesication in both cases.

I tried the effect of the blister prepared by heat on a number of persons, and found it exceedingly active. In two cases the persons had common blisters applied with less effect than was desirable, but the vesication was perfect when blisters prepared by heat were employed.

I prepared blistering plaster by exposure of the cantharides with the fatty materials to so high a temperature as 300°, and applied a blister made of it to my arm. In sixteen hours there was as perfect a vesication of the *whole* surface as ever I saw. There can be little doubt that a still higher temperature may be employed without destruction of the vesicating principle.

These experiments prove that there is not only no injury done to the vesicating principle of cantharides, even by a very high heat, but that blisters made by the heating process are rather more active than those prepared in the usual manner. Indeed it might be expected that such would be the result. The powder of cantharides, even when fine, still contains much of the cantharidin locked up in the scaly armour of the fly. By the solvent power of the melted fats, the cantharidin is dissolved out of the parenchymatous portion of the fly, and being then in its most minute state of division, it will blister with proportionate activity. The parenchymatous portion, now in a great measure exhausted of its vesicating principle, is perhaps detrimental, by occupying space without contributing power.

Much trouble is saved by preparing blistering plaster by the high temperature plan. When the cantharides are used according to the instructions of the pharmacopœia, they must be finely powdered, an exceedingly difficult task: while, in the other way, they need only be somewhat broken down, and they may be removed by the strainer when the active principle has been dissolved and extracted from them.

It remains to show that the employment of heat in the preparation of blistering plaster has other advantages. Damp is a great enemy to the balance of the elementary affinities in the fly. I have found that powder of cantharides which contained merely their usual quantity of moisture when put into a glass bottle and well closed up with a glass stopper, acquired an intolerable fœtor after some months. The powder exhaled ammonia; for when a slip of paper wet with dilute nitric acid was let down into it, white fumes were abundantly produced. This proves decomposition. The smell of ammonia was even recognizable in the fœtor. Long before this period the powder had become mouldy.

We know also that blistering plaster always becomes mouldy when any moisture had been left in its ingredients. Suet and hog's-lard put up in a moist state become mouldy; but both of them keep better, and the former for a long time perfectly well, when moisture has been carefully excluded.

Thus moisture is detrimental to all the ingredients of blistering plaster; and hence every precaution ought to be taken to expel it. This will best be done by heating the fatty materials melted with the resin to the temperature of 250°; the water will have bubbled off in steam when this degree has been attained. If powder of cantharides, in its ordinary state of dryness, be thrown into the fats heated to this temperature, there will be a sudden, copious, and long-continued extrication of steam bubbles, although the powder had been to all appearance dry.

These observations afford the principles on which blistering plaster of due activity and of a comparatively imperishable kind may be formed. The process is this:—Introduce the resin and fats into a proper vessel: melt them; throw in the powder of cantharides; stir the mixture continually until a thermometer immersed in it indicates that the temperature has risen to 250°. Remove the vessel from the fire, and, if the cantharides are not to be strained off, continually stir the ointment. By these means, all the water will have been expelled from the fats, the resin, and the cantharides: and a plaster will be obtained much less liable to injury from being kept than the common.

The employment of a high temperature, in the preparation of blistering plaster, has several beneficial effects. It causes the solution of the vesicating principle in the fats, thus producing a blister more certain in its operation. It expels the water which naturally exists in all the ingredients of blistering plaster, and endangers its spoiling if long kept.

While I am on this subject it may be proper to allude to a proposal which has been made of a method of obviating strangury arising from the action of blisters. It consists in boiling the cantharides in water previously to their being pulverized, and drying them. After this, it is said they no longer possess the injurious property.—*Ibid.*, from *Dublin Medical Press*, August 19, 1840.

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15. *Spasmodic Affection of the Larynx and its Appendages cured by the External Application of Veratria.* By Dr. JAMES TUNSTALL.—Mrs. S., ætat. 44, widow, of a leucophlegmatic habit, spare frame, short stature, schoolmistress, when young had a violent and dangerous attack of pleurisy, the bleedings necessary for the cure of which, "left her in such a weak state that she considers herself never to have regained her strength, and to this she attributes the violent attacks which are more immediately to engage our attention.

"Suddenly, and without previous premonitory symptoms, she is seized with a sense of suffocation, the whole of the muscles employed in respiration are put into violent and convulsive action, the lower extremities become cold, the face